

# Converting Colors

CIELCh(90, 3.868, 109.975)

Have a look what the booklet for  
CIELCh(90, 3.868, 109.975) contains.

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# Color

**CIELCh(90, 4.137, 109.823)**

# Conversions

## Conversions Part 1

Format	Color
Hex	E3E3DB
RGB	227, 227, 219
RGB Percent	89%, 89%, 86%
CMY	0.1102, 0.1102, 0.1416
CMYK	0.00, 0.00, 0.04, 0.11
HSL	60°, 12%, 87%
HSV	60°, 4%, 89%
XYZ	71.8580, 76.3034, 77.8859
YIQ	226.0880, 2.5680, -2.4880

# Conversions

## Conversions Part 2

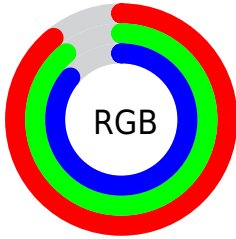
<b>Format</b>	<b>Color</b>
R <sub>Y</sub> B	219, 227, 219
Decimal	14935003
CIE Lab	90.00, -1.40, 3.89
CIE LCh	90, 4.137, 109.823
Yxy	76.3034, 0.3179, 0.3376
Android (android.graphics.Color)	4293125083 (0xFFE3E3DB)
YUV	226.0880, -3.4944, 0.7998
Hunter-Lab	87.3518, -6.0265, 8.2812

# Details

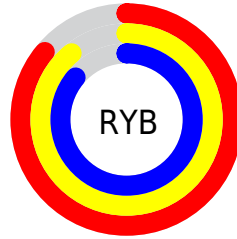
The CIELCh color `90, 4.137, 109.823` is a light color, and the websafe version is hex `CCCCCC`. A complement of this color would be `88, 4.191, 290.561`, and the grayscale version is `90, 0.011, 296.813`.

A 20% lighter version of the original color is `100, 0.012, 296.813`, and `70, 4.358, 109.727` is the 20% darker color. If you saturate the color by 10%, you get `89, 15.869, 108.888`, and if you desaturate by 10%, it is `91, 7.630, 290.820`.

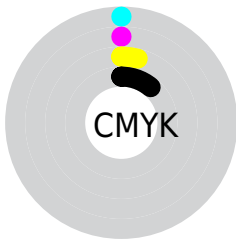
# Distribution



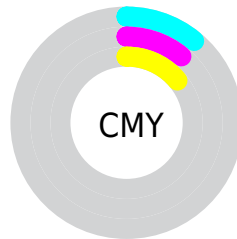
- Red (89%)
- Green (89%)
- Blue (86%)



- Red (86%)
- Yellow (89%)
- Blue (86%)



- Cyan (0%)
- Magenta (0%)
- Yellow (4%)
- Black (11%)



- Cyan (11%)
- Magenta (11%)
- Yellow (14%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 90, 4.137, 109.823 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.

Similar to the brightness gradients but the following saturation gradients show a change of the CIELCh color 90, 4.137, 109.823 by changing the saturation by 10% instead.



■ 90, 4.137, 109.823

■ 90, 4.137, 109.823

■ 100, 4.137,  
109.823

■ 80, 4.137, 109.823

■ 70, 4.137, 109.823

■ 60, 4.137, 109.823

■ 50, 4.137, 109.823

■ 40, 4.137, 109.823

■ 30, 4.137, 109.823

■ 20, 4.137, 109.823

■ 10, 4.137, 109.823

■ 0, 4.137, 109.823

90, 4.137, 109.823

90, 4.137, 109.823

89, 15.869,  
108.888

91, 7.630, 290.820

89, 27.495,  
107.917

91, 14.587,  
291.371

89, 38.917,  
106.954

91, 14.587,  
291.387

88, 49.976,  
106.024

91, 14.587,  
291.402

88, 60.430,  
105.152

91, 14.587,  
291.418

88, 69.916,  
104.373

91, 14.587,  
291.433

88, 77.940,  
103.727

91, 14.588,  
291.449

88, 83.938,  
103.253

91, 14.588,  
291.464

■ 88, 87.494,  
102.978

■ 91, 14.588,  
291.480

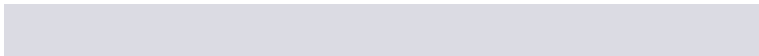
# Harmonies

# Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



90, 4.137, 109.823



88, 4.191, 290.561

# Rectangle

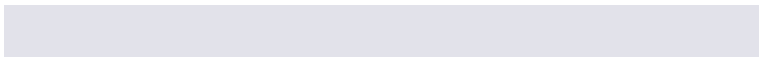
The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



90, 4.137, 109.823



90, 4.137, 159.823



90, 4.137, 289.823



90, 4.137, 339.823

# Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



90, 4.139, 109.844



100, 1.282, 110.042



88, 2.896, 19.409



53, 0.729, 110.044



0, 0.000, 0.000



53, 0.007, 296.813



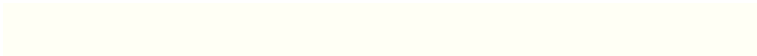


# Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



90, 4.139, 109.844



100, 5.161, 109.798



90, 4.402, 128.945



47, 3.303, 109.733



70, 73.366, 102.884

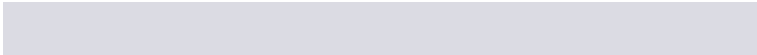


19, 27.933, 103.914



# Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



88, 4.191, 290.561



97, 5.227, 290.610



88, 4.442, 309.193



45, 3.348, 290.679



21, 101.302, 306.289

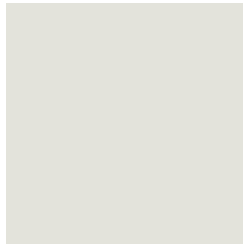


2, 31.635, 295.842



# Previews

## White Background



This preview shows how the CIELCh color 90, 4.137, 109.823 looks on a white background.

## Color Contrast Check

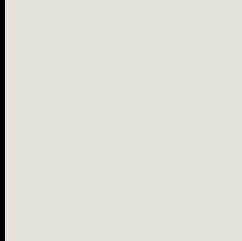
Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

# Black Background



This preview shows how the CIE LCh color 90, 4.137, 109.823 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

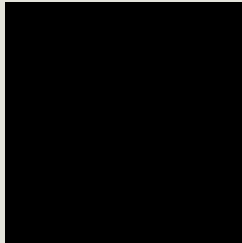
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

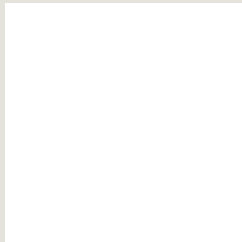
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**CIELCh 90, 4.137, 109.823**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 90, 4.137, 109.823.

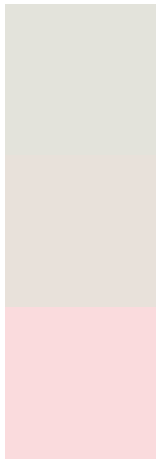


This preview shows how white text looks on a background with the CIELCh color 90, 4.137, 109.823.

# Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

## Dichromacy



**Original Color**

90, 4.137, 109.823

**Protanopia**

90, 4.410, 74.592

**Deuteranopia**

90, 11.416, 15.002





**Tritanopia**  
90, 9.120, 304.147

# Trichromacy



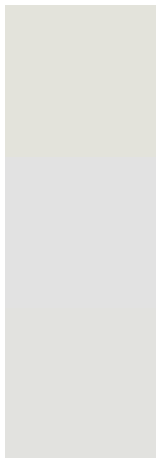
**Original Color**  
90, 4.137, 109.823

**Protanomaly**  
90, 4.373, 90.420

**Deuteranomaly**  
90, 7.377, 27.885

**Tritanomaly**  
90, 4.417, 309.189

# Monochromacy



**Original Color**  
90, 4.137, 109.823

**Achromatopsia**  
90, 0.011, 296.813

**Achromatomaly**  
90, 1.546, 110.006

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 90, 4.137, 109.823 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color `rgb(227, 227, 219)` looks like.

```
.text, #text, p{  
    color:rgb(227, 227, 219)  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel rgb(227, 227, 219) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(227, 227, 219) }
```

## Border

The CSS property to change the border of an element to CIELCh 90, 4.137, 109.823 is called "border". The border property can be set on classes, ids or directly on the HTML element.

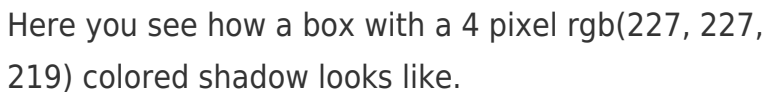
This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(227, 227, 219) }
```

If only the border color should be changed use the property `border-color`.

```
.border{ border-color:rgb(227, 227, 219) }
```

If you want to add a box shadow in that color use:



Here you see how a box with a 4 pixel `rgb(227, 227, 219)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px 4px rgb(227, 227, 219); -webkit-box-shadow:4px 4px 4px 4px rgb(227, 227, 219); box-shadow:4px 4px 4px 4px rgb(227, 227, 219) }
```

# Background

The CSS property to change the background color of an element to CIELCh 90, 4.137, 109.823 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(227, 227, 219) }
```

If only the background color should be changed can be used:

```
.background{ background-color: rgb(227,  
227, 219) }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).

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